

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-3 (canceled).

4. (previously presented) A method for producing a vertical MOSFET, the method comprising:

selecting an active region in a major surface of a semiconductor body of a first conductivity type;

implanting dopants of a second conductivity type in all of said active region;

forming a plurality of spaced channel region of said second conductivity type in said active region; and

forming at least one source region of said second conductivity type in each of said channel regions.

5. (previously presented) The method of claim 4 further comprising, forming gate structures adjacent each channel region, each gate structure comprising a gate oxide formed over said active region and a respective gate electrode disposed over said gate oxide.

6. (previously presented) The method of claim 4 further comprising, forming a field oxide layer over said major surface of said semiconductor body and opening a window to expose said active region.

7. (previously presented) The method of claim 6, wherein said dopants of said second conductivity type are implanted through said window in said field oxide layer.

8. (previously presented) The method of claim 4, wherein said dopants of said second conductivity type are comprised of boron.

9. (previously presented) The method of claim 4, wherein said dopants of said second conductivity type are comprised of one of arsenic and phosphorous.

10. (previously presented) The method of claim 5 further comprising, forming depositing and oxide interlayer over said active region; opening windows over at least said source regions; and forming a source contact over said active region.